



## **Bread - How does bread get made at the supermarket?**

### **Fact**

- Bread gets made at the supermarket the same way you would make a loaf of bread at home. They just make a lot more of it :o)
- Most supermarkets have a special kitchen for making all their bakery products. In it they have huge mixing bowls and a huge oven.
- All the ingredients like flour, yeast, sugar and water are mixed in the mixing bowl and then the dough is “rested” to give the yeast time to start “working” and making the dough rise.
- To make a loaf of bread the dough is cut into the same sized pieces in a cutting machine and then kneaded into round shapes and left to rest again.
- The balls of dough are then rolled into long roll shapes in another machine before they are cut into four pieces and put into a metal loaf tin.
- Then the dough gets to rest in the “proofer” which is like a cupboard that is hot and humid (damp). The yeast loves this kind of environment and it helps the dough to rise even more.
- After the dough is cooked in the huge oven the bread is left to cool on a huge conveyer belt which helps to cool it more quickly because the air can travel round it carrying away the heat.
- Then the bread is sliced, put into bags and labelled before being put on the shelf for sale.

### **Do you know**

- Yeast is a living fungus that feeds on the sugar and water in the bread mixture and as it feeds it grows. It also releases gasses and these gasses stretch the dough making it rise (get bigger)
- Kneading the dough helps make the dough smoother.
- It takes about 4.5 hours to make, bake, cool and pack a loaf of bread at a supermarket and the Countdown Supermarket we went to makes over 2000 loaves and 6000 rolls per day.
- There are over 150,000,000 loaves of bread sold in New Zealand each year!

### **Experiments you can do**

Make your own bread

This is a recipe for focaccia bread. It doesn't need to be baked in a tin – in fact it ends up being quite flat, but it is yummy.

### What you need:

An adult assistant :o)  
2 cups of warm water  
1 tablespoon of dried yeast  
a pinch of sugar  
4 cups of plain flour  
1 teaspoon of salt  
1 small bowl  
1 large bowl  
1 extra cup of flour  
a clean benchtop  
a baking tray  
cooking oil

### What you do:

Put the 2 cups of warm water into the small bowl. Sprinkle in the yeast and the sugar and leave it to froth for about 10 minutes.

Put the flour and salt into the large bowl and then pour in the yeast mixture and mix it together well.

Sprinkle the extra flour over the clean bench top and then tip the dough out onto it.

Knead the dough with your bare hands for about 5 minutes until it makes the dough smooth and most of the extra flour has been mixed in.

Oil the baking tray with the cooking oil and then pat the dough out onto the tray so it's about 2cm thick. Brush some oil on to the top of the dough so it doesn't dry out then leave the dough on the tray in a warm place until the dough rises and doubles in size. You can cook the dough as it is or sprinkle it with a little rock salt and dried herbs or olives, sweet chilli sauce or grated cheese.

Cook it for about 15 minutes at 250 degrees Celsius.

Take it out of the oven and leave it to cool.

### **Other Investigations**

Yeast is a living fungus. When it's dried it's like the yeast is asleep. When you give it warm water and sugar you wake it up and give it something to eat. When you're making the bread recipe above watch what happens when you wake up the dried yeast with the water and sugar. It will start to froth. The froth is formed by the fungus eating the dissolved sugar and making gas. It's that gas that makes the bread dough rise too. If your yeast mixture doesn't froth or the dough doesn't rise very much check the use by date on the container and make sure your dough is in a warm place. Yeast fungus likes warm places.

### **Jokes**

Why did the yeast set its alarm for 6am?

It was an early riser